



# St. Louis 8-hour Ozone and PM<sub>2.5</sub> SIP Development Status Report

March 30, 2006

Missouri Air Conservation Commission

John Rustige, P.E.  
Air Pollution Control Program

- Review of Ozone Implementation Schedule
- Emission Inventory Element
- Reasonably Available Control Technology (RACT)
- Rate of Progress (ROP)
- Reasonable Further Progress (RFP)
- Attainment Demonstration
- Control Strategies

# Phase 1 Review

- St. Louis is classified as a moderate nonattainment area for 8-hour ozone (subpart 2 area)
- Old 1-hour standard was revoked, but no backsliding
- Attainment date = 2010 (6 years from designation)
- Control Measures must be implemented by the start of the ozone season immediately preceding the attainment date (May, 2009).

# Ozone Implementation Schedule

DATE	ACTION
June 15, 2004	Effective date of 8-hour designation (subpart 2, moderate)
November 29, 2005	Final Phase 2 implementation rule promulgated
June 15, 2006	Emission Inventory SIPs due
September 15, 2006	RACT SIPs due
June 15, 2007	RFP & Attainment demonstration SIPs due
2010	Attainment date



## Reasonably Available Control Technology (RACT) for VOC & NO<sub>x</sub>

- RACT determinations for individual sources must be made.
- RACT element due September 15, 2006
- RACT must be implemented by May 1, 2009
- States can rely on existing RACT guidance, but preamble notes EPA intends to develop additional guidance which states must consider if developed.

## Reasonably Available Control Technology (RACT) for VOC & NO<sub>x</sub>

- Sources subject to NO<sub>x</sub> SIP call & CAIR will be presumed to meet RACT, so no analysis is required for these sources
- State also required to provide implementation of Reasonably Available Control Measures
- Rule expects consultation between states and power sector - (CAIR) workgroup

# Rate of Progress

- For St. Louis, new 15% ROP plan is not required, original approved plan is sufficient
- Jersey County Illinois is subject to the 15% ROP requirements, but this can be made up on a region-wide basis.
- However, St. Louis must meet RFP

# Reasonable Further Progress (RFP)

- RFP SIP must provide 15% emission reductions by 2008 from base year of 2002 (prior to CAIR implementation)
- All emission reductions occurring after 2002 are creditable except for certain specific emission reductions required prior to 1990 CAAA.
- VOC or NO<sub>x</sub> emission reductions (or both) can be used to achieve this requirement

# Reasonable Further Progress (RFP)

- EPA will continue to allow substitution of controls from outside nonattainment area (100 km VOC & 200 km for NO<sub>x</sub>)
- Banked emission credits must be accounted for
- RFP demonstration due June 15, 2007

# Attainment Demonstration

- Attainment demonstration SIP due June 15, 2007
- EPA asserts that transport is addressed by CAIR
- Must use most recent modeling guidance
- Some nonattainment areas may be required by EPA to produce a “Mid-Course Review” - not likely for St. Louis



# Attainment Demonstration

- Modelers:
  - Missouri APCP
  - Illinois EPA
  - Ameren
  - EPA
  - ENVIRON/Alpine Geophysics

# Attainment Demonstration

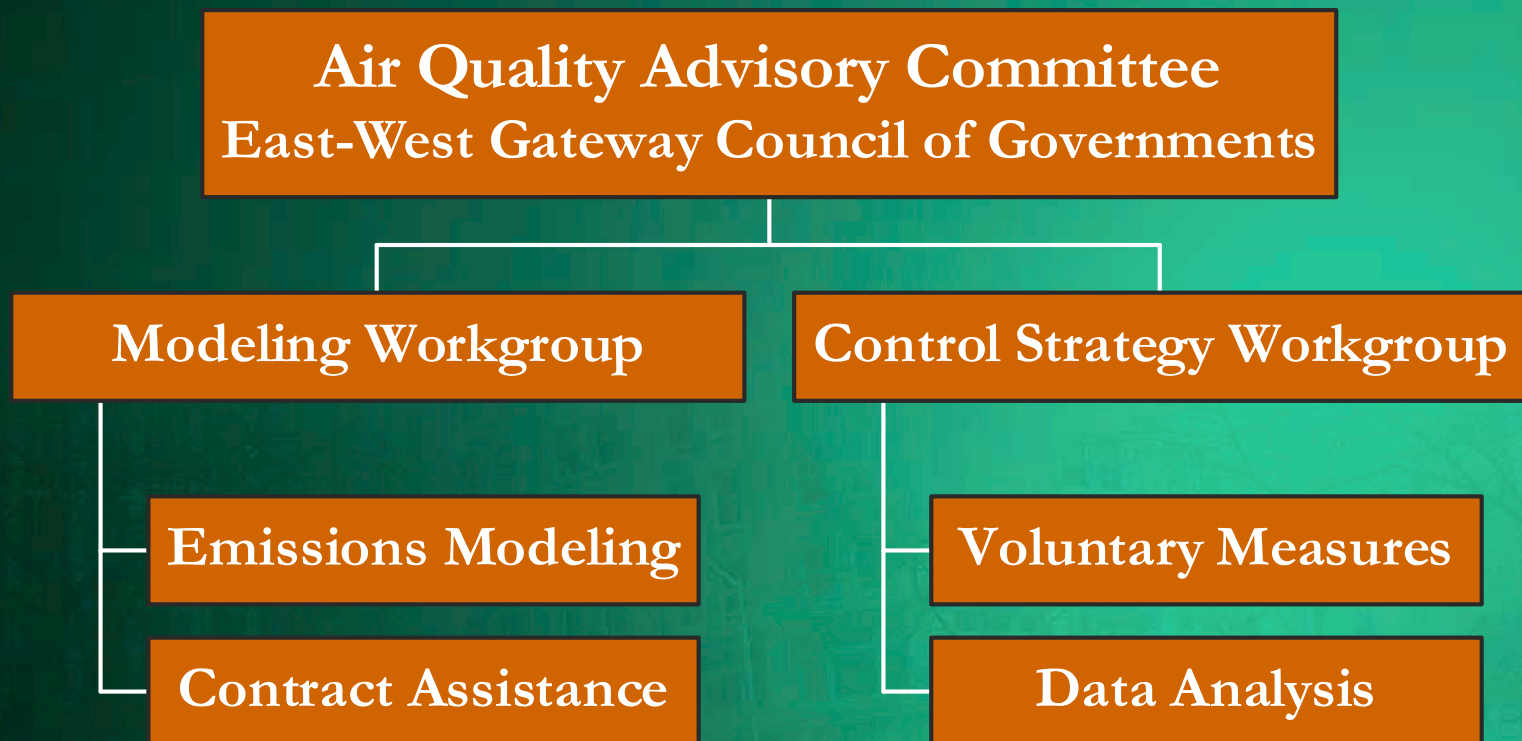
- Modeling System
  - Meteorological Model - MM5
  - Emissions Models - SMOKE and EMS
  - Photochemical (Air Quality) Models - CAMx and CMAQ

# Attainment Demonstration

- Putting final touches on 2002 “basecase”
- 2009 Inventory Refinements
  - Adding permitted sources
  - Survey of Major Sources
- Initial 2009 “on the way” run is encouraging
  - CAIR
  - Mobile (I/M, fleet turnover)

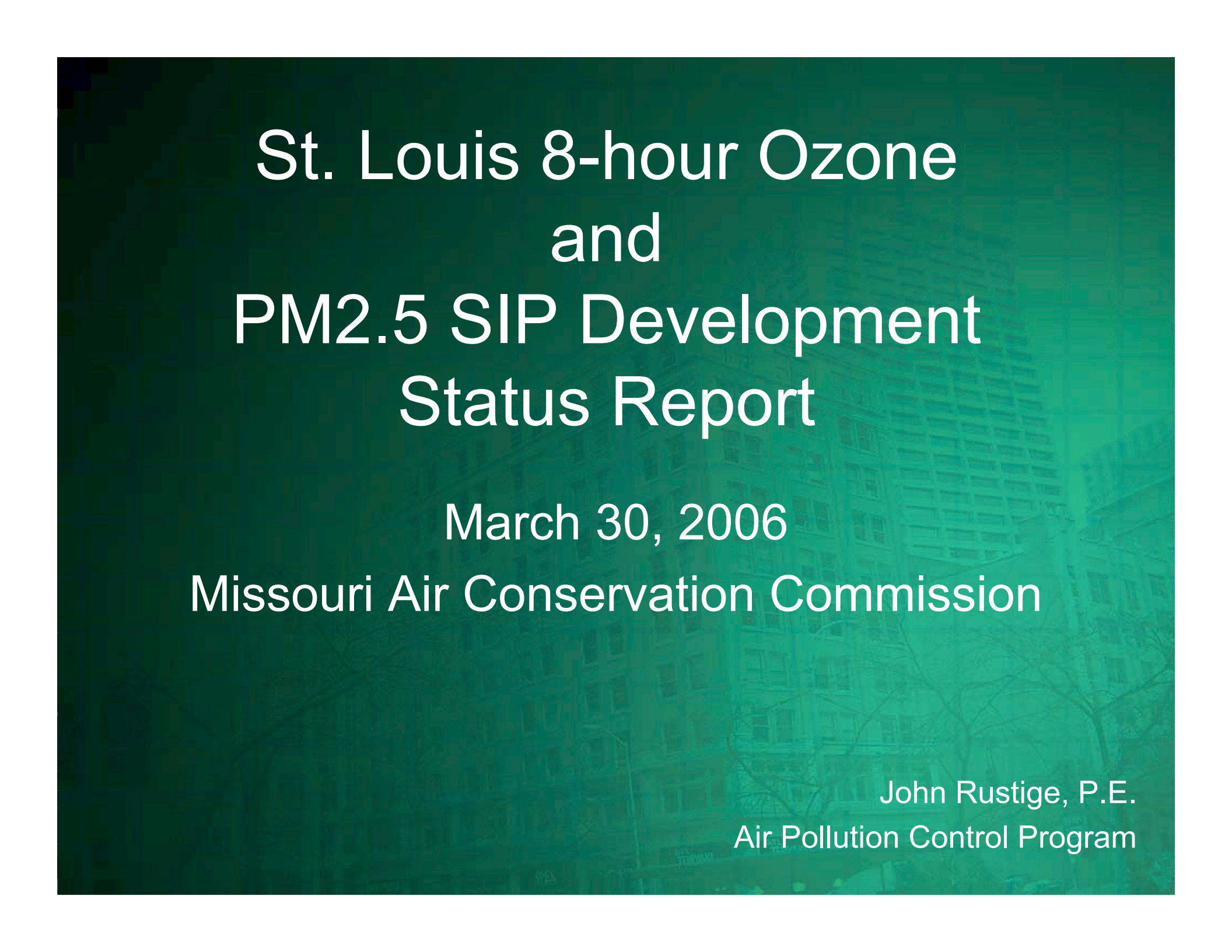
# Stakeholders

## St. Louis Ozone & PM2.5



# Final Strategy Development

- Bi-State
- Technically supported
- Consider Costs vs. Effectiveness
- Management review
- Broad stakeholder support
- Minority opinions validated
- Formal adoption by Commission
- Approvable by EPA



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